



850 Hungerford Drive * Rockville, Maryland * 20850-1747

Telephone (301) 279-3059

Mr. Robert J. Schneider
Toole Design Group
535 Main Street, Suite 211
Laurel, Maryland 20707

Dear Mr. Schneider:

I am writing to you about the *Maryland Pedestrian and Bicycle Safety Education Program* that has been developed to prevent injuries and fatalities to our children. Maryland averaged over 3,100 pedestrian and over 1,100 bicycle crashes each year between 1996 and 2000. Children were involved in these crashes more than any other group—in the year 2000, 28% of the pedestrian crash victims and 49% of the bicyclist crash victims were under age 15, though this age group makes up only 21% of Maryland's population.

While this public health problem exists, many public schools in Maryland and across the country do not currently provide pedestrian and bicycle safety education on a regular basis to children of elementary school age. The program that has been piloted through Montgomery County Public Schools within the City of Rockville and revised for implementation throughout Maryland will address this need.

The lessons in this program teach children specific behaviors that can prevent the most common types of child pedestrian and bicycle crashes. Concepts such as stopping at the edge and looking left-right-left before crossing the street, walking safely near the school bus, wearing a bicycle helmet, rules of the road, and practicing balance and turning will help children to be safe on the way to school and in their own neighborhoods.

This program has been developed by pedestrian and bicycle safety experts in close coordination and consultation with school teachers and administrators. The lessons incorporate hands-on activities, are fun for students, and are designed to achieve specific Maryland Learner Outcomes related to health, physical education, writing, mathematics, science, and social studies. The format of the lessons provides flexibility to instructors, and each lesson reviews and builds upon concepts from previous years. Another advantage to this program is the administrators guide that provides a brief overview of the program with useful information to share with school boards, PTO's, and other groups. These qualities make the program user-friendly for all educators.

The *Maryland Pedestrian and Bicycle Safety Education Program* has proven to be successful in the schools of Rockville City. It is my opinion that schools throughout Maryland would benefit from this program. Ultimately, the skills that are learned will translate to safer teenagers and adults, and reduce the overall number of pedestrian and bicycle crashes statewide. Most importantly, it will help our kids stay safe. I encourage all schools to seriously consider implementation of this program.

Sincerely,

A handwritten signature in dark ink, reading "Russell G. Henke".

Russell G. Henke
Coordinator of Health Education

ACKNOWLEDGEMENTS

This project was made possible through a grant from the Maryland State Highway Administration's Highway Safety Office. The development of the materials for the Program and the pilot test of the Program were done through the City of Rockville Department of Recreation and Parks. The City wants to recognize the teachers and local volunteers who provided support and feedback for the Program, including administrators from the Montgomery County Public Schools. A special thanks to the Duval County, FL Health Department, which hosted a team from Maryland to observe their pedestrian and bicycle traffic safety program and allowed many of their photographs to be used in this document.

The Maryland Pedestrian and Bicycle Safety Education Program was developed by building upon a number of successful curricula. These include:

- Florida Traffic and Bicycle Safety Education Program (Florida Department of Transportation, University of Florida Department of Urban and Regional Planning)
- BikeEd Program (League of American Bicyclists)
- Teaching Safe Bicycling Program (Wisconsin Department of Transportation)
- BikeEd Hawaii Bicycle Education Program (City and County of Honolulu, Hawaii Bicycling League)
- Basics of Bicycling (Bicycle Federation of America)
- Bicycle Safety Education Program (Maine Department of Transportation, Bicycle Coalition of Maine)
- Effective Cycling (video) (League of American Bicyclists, John Forrester)
- Ride Smart: It's Time to Start (video) (National Highway Traffic Safety Administration)

DISTRIBUTION INFORMATION

Funding for this document was provided by the Maryland State Highway Administration's Highway Safety Office. Additional copies of the Administrator's Guide, Teacher's Guide, and Lesson Handbook are available from the Maryland Highway Safety Office in hard copy and CD formats. To request a copy, contact:

Pedestrian and Special Programs Coordinator

Maryland Highway Safety Office

7491 Connelley Drive

Hanover, MD 21076

Phone: 410-582-5578

Fax: 410-787-4020

PUBLICATION DATE: 2003

This document is disseminated under the sponsorship of the Maryland State Highway Administration in the interest of information exchange. The State of Maryland assumes no liability for its contents or use thereof.



Maryland Pedestrian and Bicycle Safety Education Program – Teacher's Guide



Duval County, FL Health Department

INTRODUCTION	3
1. Introduction	4
TEACHER LESSON SUMMARY– K-2 (PEDESTRIAN), 3-5 (BICYCLE)	5
PEDESTRIAN LESSON SUMMARY	6
2. Pedestrian Lesson Summary	7
2.1. Kindergarten Pedestrian Lessons	8
2.2. 1st Grade Pedestrian Lessons	9
2.3. 2nd Grade Pedestrian Lessons	10
3. Bicycle Lesson Summaries	11
3.1. 3rd Grade Bicycle Lessons	12
3.2. 4th Grade Bicycle Lessons	13
3.3. 5th Grade Bicycle Lessons	14
TEACHER'S BACKGROUND INFORMATION	15
4. Basic Concepts of Pedestrian and Bicycle Safety	16
4.1. Pedestrian Safety Concepts	16
4.2. Bicycle Safety Concepts	20



5. Implementing the Maryland Pedestrian and Bicycle Safety Education Program	25
5.1. Program Overview	25
5.2. Lesson Plans	26
5.3. Program Flexibility	26
5.4. Program Coordinator	28
5.5. Maryland Learner Outcomes	28
5.6. Lesson Contents	29
5.7. Lesson Timing	30
5.8. Sticking to the Program	30
6. Class Management Principals	31
6.1. Rules	31
6.2. Students who do not know how to Ride a Bicycle	32
6.3. Ideas for Students Who Are Waiting or Not Doing an Activity	32
7. Materials Needed for the Program	33
7.1. Bicycle Helmet Sales	35
8. Time-Saving Tips	36
9. Promoting the Maryland Pedestrian and Bicycle Safety Education Program	37
9.1. Student and School Achievement Awards	38
9.2. Parent and Community Support	38
9.3. Documenting Effectiveness	40
9.3.1. Participation Records	41
9.3.2. Parent Survey	42
9.3.3. Pedestrian Program Pre- and Post-Tests for Students	43
Pedestrian Safety Evaluation Form (Answer Key)	44
9.3.4. Bicycle Program Pre- and Post-Tests for Students	45
Bicycle Safety Evaluation Form (Answer Key)	47
9.3.5. Student Travel Survey	49
9.3.6. Behavioral Observations	51
10. Additional Resources	53
10.1. Announcement about the program for Parents/Guardians	53
10.1.1. Announcement about the Pedestrian Safety Education Program	54
10.1.2. Announcement about the Bicycle Safety Education Program	55
10.2. Review of what Students Learned in the Program for Parents/Guardians	56
10.2.1. Review of what was learned in the Pedestrian Safety Education Program	57
10.2.2. Review of what was learned in the Bicycle Safety Education Program	58
10.3. Summary of Maryland Pedestrian and Bicycle Safety Education Program for Newsletter	59
10.4. Resources for Assistance in Developing a Program	60
10.5. Bicycle Trailer Content Checklist	61
10.6. Bicycle Helmet Notices for Parents	62
10.7. Bicycle Helmet Safety Standard Certificate	64
10.8. Bike Helmet Order Form	65
10.9. Example Certificate of Achievement	66
10.10. Pedestrian and Bicycle Safety Trivia Cards	67
10.11. Find the 12 Hazards Worksheet	68
10.12. Program Flier	69



Introduction



Duval County, FL Health Department

1. Introduction

Welcome to the **Maryland Pedestrian and Bicycle Safety Education Program!** Thank you for making a commitment to teach children the knowledge and skills needed to walk and bike safely. With your help, the percentage of all pedestrians and bicyclists (many of whom are children) that are injured and killed in Maryland each year will be reduced. In addition, this program will help increase the number of children (and ultimately adults) who are confident in their ability to be safe as they walk and bike in their community. The program is intended to complement lessons that you are already teaching.

There are several materials that provide the information needed to implement the Maryland Pedestrian and Bicycle Safety Education Program. They are included in the program materials package in the following order:

- 1) Administrator's Guide
- 2) Teacher's Guide (Introduction, Teacher Lesson Summary, and Teacher Background Information)
- 3) Lesson Handbook
- 4) Videos and other support materials

This Teacher's Guide can be kept for reference as you begin and continue to teach the safety program on your own. It contains information about:

- Basic concepts of pedestrian and bicycle safety (safe street crossing, traffic laws, on-bike skills)
- Program implementation
- Class management during skills activities
- Equipment management (overheads, graphics, props, cones, sponges, helmets, bikes)
- Program promotion

It is complemented by an Administrator's Guide (containing information about the importance of the overall program, the relevance of each lesson, and advice for implementing the program) and a Lesson Handbook (containing the lesson plans).

Again, thank you for providing the education that is needed for Maryland children to live healthier, safer lives!



TEACHER LESSON SUMMARY— K-2 (PEDESTRIAN), 3-5 (BICYCLE)

These two sections summarize the contents of the **Maryland Pedestrian and Bicycle Safety Education Program** lessons by grade level. A more detailed description of the program is given in the Teacher's Background Information section of this Teacher's Guide.



Duval County, FL Health Department



Pedestrian Lesson Summary



Toole Design Group

2. Pedestrian Lesson Summary

The Maryland Pedestrian and Bicycle Safety Education Program is taught to Kindergarten, First Grade, and Second Grade Students. The objectives of each lesson are summarized by grade level on the following pages. Detailed lesson plans are provided in the Lesson Handbook.



www.pedbikeimages.org/Dan Burden

2.1. Kindergarten Pedestrian Lessons

Kindergarten Core Lessons	Time	Objectives	Activities
1. Crossing Safely	20 minutes	To learn the steps in crossing a street (stopping at the curb; finding the edge; looking to the left, to the right, and again to the left; and continuing to scan for traffic while crossing).	Looking Left-Right-Left Activity; Crossing the Street Song; Crosswalk Activity with Parent (Optional)
2. Bus Safety	30 minutes	To understand how to wait for the bus, enter and exit the bus, and cross the street near the bus safely.	Crossing Safely Near A Bus Activity
3. Crossing the Intersection	25 minutes	To learn the differences between crossing the street and crossing at an intersection, including looking behind for traffic.	Intersection Crossing Activity; Concentration Cards Activity (Optional); Put the Crossing Steps in Order Activity (Optional)
4. Perils of the Parking Lot	25 minutes	To learn the basic concepts needed to be a safe pedestrian in a parking lot (getting in and out of a car safely, and where to walk safely in a parking lot)	Getting In and Out of A Car Safely Activity
Kindergarten Enrichment	Time	Objectives	Activities
5. Traffic in Towntown	35 minutes	To practice safe pedestrian practices learned over the year.	Traffic in Towntown (mock city) Activity
6. Neighborhood Walkabout	40 minutes	To experience crossing streets and intersections with the teacher in a real-life situation	Neighborhood Walkabout Activity; Identify Places where students feel safe or unsafe on the walk on a map (Optional)
7. Special Speaker	35 minutes	To review pedestrian safety concepts with a community leader	Guest Speaker



2.2. 1st Grade Pedestrian Lessons

1st Grade Core Lessons	Time	Objectives	Activities
1. Crossing Safely	30 minutes	To understand what a hazard is and what hazards can make it unsafe to cross the street. To identify locations that are hazardous to cross the street and understand the second edge.	Visual Barriers Activity; Crossing the Street Song (optional); Write Letter to A Friend About a Crossing Hazard (optional)
2. Bus Safety	30 minutes	To understand how to wait for the bus, enter and exit the bus, and cross the street near the bus safely (including the concept of the second edge)	Crossing Safely Near A Bus Activity; Waiting for the Bus with a Parent (optional)
3. Crossing the Intersection	30 minutes	To review looking behind for traffic when crossing at an intersection and understand different types of dangerous scenarios at intersections	Bad Driver Identification Video; Letter to Dangerous Driver; Observe Drivers at Intersection (optional)
4. Perils of the Parking Lot	30 minutes	To understand the need to find safety areas in a parking lot and learn safe practices for crossing a parking lot	Mapping a Safe Path through a Parking Lot Activity; Safe Path through Neighborhood Grocery Store Poster (optional)
1st Grade Enrichment	Time	Objectives	Activities
5. Traffic in Tintown	35 minutes	To practice safe pedestrian practices learned over the year.	Traffic in Tintown (mock city) Activity
6. Neighborhood Walkabout	40 minutes	To experience crossing streets and intersections with the teacher in a real-life situation	Neighborhood Walkabout Activity; write aq letter to a friend about the Walkabout (optional)
7. Special Speaker	35 minutes	To review pedestrian safety concepts with a community leader	Guest Speaker



2.3. 2nd Grade Pedestrian Lessons

2nd Grade Core Lessons	Time	Objectives	Activities
1. Crossing Safely	20 minutes	To bring all the knowledge that has been learned about crossing streets safely into a presentation.	Crossing the Street Skit; Crossing the Street Song (Optional); Write Letter to A Friend About a Crossing Hazard (Optional)
2. Bus Safety	30 minutes	To understand how to wait for the bus, enter and exit the bus, and cross the street near the bus safely (including the concept of the second edge)	Crossing Safely Near A Bus Activity
3. Crossing the Intersection	30 minutes	To review looking behind for traffic when crossing at an intersection and understand different types of dangerous scenarios at intersections	Dangerous Driver Skits; Pedestrian Fairy Tale
4. Perils of the Parking Lot	35 minutes	To understand the dangerous types of behavior drivers may exhibit in a parking lot.	Dangerous Driver Skits; Observe Drivers in a Parking Lot (Optional)
2nd Grade Enrichment	Time	Objectives	Activities
5. Traffic in TINYtown	35 minutes	To practice safe pedestrian practices learned over the year.	Traffic in TINYtown (mock city) Activity
6. Neighborhood Walkabout	40 minutes	To experience crossing streets and intersections with the teacher in a real-life situation	Neighborhood Walkabout Activity; Bad Driver Tally (Optional); Find Secret Spots on Walkabout Activity (Optional)
7. Special Speaker	35 minutes	To review pedestrian safety concepts with a community leader	Guest Speaker



3. Bicycle Lesson Summaries

The Bicycle Safety Education Program is taught to third, fourth, and fifth grade students. The objectives of each lesson are summarized by grade level on the following pages. Detailed lesson plans are provided in the Lesson Handbook.



Duval County, FL Health Department

3.1. 3rd Grade Bicycle Lessons

3rd Grade Core Lessons	Time	Objectives	Activities
1. Always Wear Your Helmet	35 minutes	To understand the importance of always wearing a helmet, to demonstrate how to fit a helmet properly (be able to check the five steps), and to learn how to care for and replace a helmet.	Egg Drop; Five Steps for Fitting a Helmet Activity; Drawing of Yourself on a Bike with a Helmet on (optional)
2. Preparing to Ride Safely	30 minutes	To learn how to perform safety checks before riding and to practice getting on and off and stopping a bicycle safely.	YOU Check; Bike Fit Check; ABC Quick Spin Check; Getting On and Off the Bike, Stopping, and Stopping and Looking Activities
3. Learning About Traffic Laws and Hazards	20 minutes	To learn the rules of the road; learn the meaning of stop and yield signs, stop lights, bike lanes; and to recognize common bicycling hazards (debris, darkness, wet roads, etc.).	Bicycle Safety Rules Homework
4. Bike Skills I	35 minutes	To practice skills such as controlling a bicycle and scanning for traffic.	Getting On and Off the Bike, Stopping, Slalom and Scanning Activities
3rd Grade Enrichment	Time	Objectives	Activities
5. Bicycling Near Home and Around the World	25 minutes	To understand that bicycles are used around the world for transportation and recreation and that learning to ride safely is essential.	Write About Bicycling in A Different Country (Optional)
6. Bicycle Field Trip	50 minutes	To experience bicycling safely and legally in a real-life situation.	Neighborhood Bicycle Ride Activity; Skills Test (Optional)



3.2. 4th Grade Bicycle Lessons

4th Grade Core Lessons	Time	Objectives	Activities
1. Always Wear Your Helmet	35 minutes	To understand the importance of always wearing a helmet, to demonstrate how to fit a helmet properly (be able to check the five steps), and to learn how to care for and replace a helmet."	Melon Drop; Five Steps for Fitting a Helmet Activity; Drawing of Yourself on a Bike with a Helmet on (Optional)
2. Preparing to Ride Safely	35 minutes	To review how to do safety checks before riding and to practice stopping and making eye contact.	YOU Check; Bike Fit Check; ABC Quick Spin Check; Stopping and Making Eye Contact Activities
3. Learning About Traffic Laws and Hazards	25 minutes	To learn the rules of the road; learn the meaning of stop and yield signs, stop lights, bike lanes; and to recognize common bicycling hazards (debris, darkness, wet roads, etc.).	Intersection Observation/ Hazard Identification Activity
4. Bike Skills I	35 minutes	To review skills such as stopping and scanning, and practice skills such as turning and signaling.	Activity Stations for Review; Turning and Scanning Activity
4th Grade Enrichment	Time	Objectives	Activities
5. Bicycling Near Home and Around the World	35 minutes	To understand that learning to ride safely is essential and identify safe and unsafe areas in their neighborhood for bicycling.	Neighborhood Mapping Activity
6. Bicycle Field Trip	50 minutes	To experience bicycling safely and legally in a real-life situation.	Neighborhood Bicycle Ride Activity; Skills Test (Optional)



3.3. 5th Grade Bicycle Lessons

5th Grade Core Lessons	Time	Objectives	Activities
1. Always Wear Your Helmet	35 minutes	To understand the importance of always wearing a helmet, to demonstrate how to fit a helmet properly (be able to check the five steps), and to learn how to care for and replace a helmet."	Brain Mold Demonstration; Five Steps for Fitting a Helmet Activity
2. Preparing to Ride Safely	35 minutes	To review how to do safety checks before riding and to practice maintaining control of the bicycle while riding in a large group.	YOU Check; Bike Fit Check; ABC Quick Spin Check; Stopping and Making Eye Contact, and Traffic Mix Activities
3. Learning About Traffic Laws and Hazards	25 minutes	To learn the rules of the road; learn the meaning of stop and yield signs, stop lights, and to understand how to ride safely over railroad tracks.	Mapping a Safe Route to School Exercise; Riding a Safe Route to School Exercise
4. Bike Skills I	45 minutes	To review skills such as stopping, slalom, scanning and signaling, and to practice avoiding hazards.	Activity Stations for Review; Rock Dodge Activity
5th Grade Enrichment	Time	Objectives	Activities
5. Bicycling Near Home and Around the World	30 minutes	To understand that bicycling promotes personal and environmental health and that bicycling represents a sound economic decision.	Economic Cost of Driving vs. Biking Calculation Activity; Visit Car Dealer and Bike Shop (Optional)
6. Bicycle Field Trip	50 minutes	To experience bicycling safely and legally in a real-life situation.	Neighborhood Bicycle Ride Activity; Skills Test (Optional)



Teacher's Background Information



Duval County, FL Health Department

4. Basic Concepts of Pedestrian and Bicycle Safety

It is very important that you, the teacher, understand the basic concepts of pedestrian and bicycle safety that will be taught during this course. Since you may not have had this training, this section has been provided to give you an overview of the concepts that you will be teaching.



Duval County, FL Health Department

690 bicyclists were killed and 51,000 were injured in the United States in 2000.

(National Highway Traffic Safety Administration, 2001)

4.1. Pedestrian Safety Concepts

Young Children Should Not Cross Streets Alone

Most children in kindergarten through second grade are not ready to cross streets on their own. They should be encouraged to cross the street only with the help of an adult. Children typically develop the cognitive ability to cross streets on their own between third and fourth grade.

Stop at the Edge

Most children do not fully grasp the dangers they face crossing streets. Often their parents teach them to stop at the curb before crossing, yet in many locations their view of oncoming traffic is blocked by parked cars or other obstructions. These lessons teach the concept of stopping at the edge. The edge is a safe place where pedestrians can view traffic.

50% to 60% of pedestrian injuries to children aged 5 to 9 are "mid-block" dart-out" crash types.

(Federal Highway Administration, 1996)



Look to the Left, to the Right, and again to the Left

It is important for pedestrians to look for vehicles approaching from the left; look for vehicles approaching from the right; and then look for vehicles approaching from the left again. You look to the left first because that is the vehicle lane closest to you. Looking left a second time is critical, because a vehicle may have turned into the roadway quickly or be traveling faster than expected.

Scan Left and Right

Pedestrians should keep looking to the left and to the right while crossing (this is called scanning). Vehicles may turn into the roadway from nearby driveways, vehicles may be accelerating, or they may have been missed when looking to the left, to the right, and again to the left. It is critical to scan to detect surprise dangers.

Walk, Don't Run

Children should not run when crossing the street. Children may want to run across the street to complete crossing quickly, but this can cause a fall and make it extremely difficult to scan to the left and to the right to look for oncoming vehicles or hazards while crossing. They should not run across driveways, dirt roads, alleys or any other conflict points.

Walk Straight Across the Roadway

Children (and adults as well) often attempt to cut diagonally across the street to get to their destination faster. Yet this increases the amount of time they are exposed to traffic. Crossing straight minimizes the amount of time that a pedestrian spends in the vehicle travel lanes.

Appropriate Street Crossing Locations

It is important for pedestrians not to cross between parked vehicles or at the crest of a hill because it is difficult for both drivers and pedestrians to see each other at these locations. Similar situations may occur when there is fencing or shrubbery near a driveway or street entrance to the roadway. In addition, pedestrians should use crosswalks if they are available.



Toole Design Group



The Second Edge

In some cases, there may be a line of parked cars or other objects in the road and there is no good alternative crossing location where the pedestrian can get a better view of traffic. Or, a student may be crossing the street in front of a school bus at a drop-off location. Where this situation exists, pedestrians should first stop at the curb, edge of pavement, or white shoulder stripe. Then they should look to the left, to the right, and again to the left. When it is safe, they should step forward just far enough so that they can look around the school bus, parked cars, or objects and also be seen by moving vehicles. At that point, they should look to the left, to the right, and again to the left, and then proceed to cross (while continuing to scan to the left and to the right).

51% of crashes involving pedestrians under age 15 are between 2 and 6 p.m., which is when children are walking home or playing after school.

(Federal Highway Administration, 1996)

Multiple-Threat Situations

Pedestrians should not cross a roadway in a crosswalk or at any other location if only one car stops. Before crossing, all vehicles in all lanes in all directions should be stopped. A common type of pedestrian crash is a multiple-threat crash, which occurs when there is more than one lane of traffic in each direction and only one of the lanes of traffic stops, blocking the visibility between pedestrian and the driver in the adjacent lane.

The Bus Blind Spot

Walk at least 5 feet straight out from the bus doorway and then at least 10 feet beyond the front of the bus when crossing the street in front of the bus. There is a blind spot extending about 10 feet in front of the bus where the driver cannot see pedestrians. Many buses have a bar that extends in front of the bus to prevent students from crossing through the blind spot. Never cross the street behind a school bus because the driver can't see you.



Duval County, FL Health Department



Crosswalks

Children should not assume vehicles will stop for pedestrians in crosswalks. Drivers are required by law to yield to pedestrians in a crosswalk, but many pedestrian crashes still occur in them. Even when crossing at an intersection and the cross-traffic has a red light, pedestrians should cross with care. Crosswalks should be used when they are available because they help direct pedestrians to appropriate/safe crossing locations and help designate roadway space for pedestrians. However, they do not necessarily protect people who are crossing.

Look Behind at Intersections

Always check for vehicles coming from behind that may be turning across the pedestrian pathway or crosswalk before crossing a driveway, alley, or other intersection. Therefore, the complete process that a pedestrian should follow at an intersection is to:

- 1) Look to the left, to the right, and to the left again to check for traffic.
- 2) Look over shoulder to check for traffic approaching from behind and also look for traffic coming from the front.
- 3) Scan the intersection again to make sure that it is still safe. If it is not, begin the process again.
- 4) Cross, and continue to scan to the left and to the right to look for traffic while crossing.

Visibility at Night

Brightly colored (or reflective) clothing makes pedestrians more visible to drivers. Though pedestrians can see the headlights of a vehicle for a long distance, drivers will not see a pedestrian until they are within 50 to 100 feet. Depending on the vehicle's speed, this distance may be too short to stop.

Sound

Do not cross the street while listening to headphones. This will inhibit a pedestrian's ability to hear a vehicle that has suddenly entered the roadway or is approaching more quickly than expected.

Pedestrian Signals

Cross when the pedestrian signal says "WALK" (or white pedestrian symbol is shown). Do not start crossing (but complete the crossing if you are in the street) when "DON'T WALK" (or red hand symbol) is flashing. Pedestrian signals are timed so that people who walk at a slow to moderate pace will be able to finish crossing safely if they start before "DON'T WALK" (or red hand symbol) begins to flash. Do not walk when "DON'T WALK" (or red hand symbol) is steady.

Never Chase Objects Into the Street

Children may become so involved with a play activity that they may forget to remember to stop at the edge of the street. After every lesson, it is important to remind them that they should never chase a ball, a friend or any other object into the street. Children should always get an adult before going into the street. When the adult says it is okay, then they can look to the left, to the right, and again to the left, and then get the object from the street.



4.2. Bicycle Safety Concepts



Duval County, FL Health Department

Helmet

Children should be taught to ALWAYS wear a helmet while riding a bicycle, regardless of whether they are riding on a street, trail or in their own driveway. Helmets are up to 88 percent effective in mitigating head injuries. According to many doctors, 75 percent or more bicycle-related deaths would be eliminated if all bicyclists wore helmets. It is essential that you always wear your helmet when riding with the students. You are a role model.

Helmet Care/Storage

There are five things to check when fitting student helmets:

- 1) The Helmet should be level on the head.
- 2) The front and back straps should be equally tight and meet at a "V" below the ear.
- 3) There should be space for about 2 fingers between the eyebrows and the bottom of the front of the helmet.
- 4) There should be space for about 1 finger between the chin and the strap.
- 5) The helmet will move the skin on the forehead without sliding around on the head when it is pushed back and forth.

In addition to helmet fit, it is important to emphasize to the students that helmets are fragile and lose their protective value when thrown, hit, or damaged. Any damage that occurs will make the helmet not as safe as it should be. Helmets should always be removed and set down gently and stored safely after riding. They should be replaced every one to two years. **If a helmet is banged hard or is in a crash, it should be replaced immediately.**





Duval County, FL Health Department

If students bring their own helmets for the helmet lesson, you should give them a Bicycle Helmet Safety Standard Certificate to take home to their parents if their helmet is good, or send parents a sheet that has the option to check “Helmet is Too Large,” “Helmet is Too Small,” “Damaged Helmet” or “Other” if a new helmet is needed.

Preparing to Ride

It is essential to check if your clothing and bicycle equipment is safe before riding by doing the “YOU Check”, Bike Fit Check, Seat Adjustment, and “ABC Quick Spin Check.” You should always complete these checks for yourself before the students arrive.

“YOU Check”

Always perform the “YOU Check” before riding. Check to see that you:

1. are wearing a properly fitted helmet;
2. are wearing brightly colored clothing;
3. have no dangling shoe laces or pant legs that could get caught in a chain or a tire, etc.;
4. are NOT wearing headphones or anything else that would distract from hearing or make it more difficult to see traffic.

Bike Fit Check

Make sure that the bike fits properly before riding. The Bike Fit Check requires you to stand over the frame of your bike and make sure that you have 1” to 3” of clearance over the top bar. If you are not able to stand over the frame with your feet flat on the ground, your bike is too big. If there is greater than 3” of clearance, the bike is too small, unless you are riding a BMX or freestyle bicycle.



Bicycle Seat Height and Leg Extension

Younger students (third and fourth grade) should adjust the seat on their bicycle so that they can sit on the seat with their heels touching the ground. This allows them to have more control and reduces the chance of falling if they lose control of their bike. More experienced bicycle riders (fifth grade) may wish to adjust the seat on their bicycle so that they have a slight bend in their knee when their foot is at the bottom of the pedal stroke. This longer leg extension will give the rider more power when pedaling.



Toole Design Group

“ABC Quick Spin Check”

Always perform the “ABC Quick Spin Check” before riding. The parts of this check are:

1. A is for air pressure (squeeze the tires to make sure that they are firm—ask a parent to help squeeze the tire if you are not strong enough);
2. B is for brakes (squeeze the brakes and push the bike forward and backward to make sure that the bike does not move);
3. C is for chain and crank (make sure the chain is not too loose or rusty; grab the crank arms—the pieces to which the pedals are attached—and try to wiggle them side to side to make sure that they do not move);
4. Quick is for giving the rest of the bike a quick look to make sure that the chain is tight and not drooping too much, the seat and handlebars are tight, and that the reflectors are clean;
5. Spin is for spinning the wheels to make sure they spin smoothly, don’t wobble, and have no broken, missing, or loose spokes.

Different Braking Systems

It is important to note that there are two different types of bicycles that students ride. One type has coaster brakes. With this type of bike, the rider brakes by pedaling backwards. If a student is using this type of bicycle, they will have to rotate the pedals forward to put them in the proper position to begin riding.



More than 45% of bicyclists in collisions with motor vehicles are children under 15 years old, though this age group makes up only 22% of the United States' population.

(Federal Highway Administration, 1996)

The second type has hand brakes. In this case, the rider can slow the front wheel by squeezing the brake near the left handlebar and slow the rear wheel by squeezing the break near the right handlebar. Students should be encouraged to use the right/ rear brake because braking too hard and fast using the left/ front brake can cause the front of the bike to slide out from under them or the rear of the bike to lift and the rider could loose control or flip over entirely.

Starting to Ride

All bicyclists should follow these directions to start riding safely: (1) Straddle the bike with both feet on the ground; (2) Raise left pedal to the 10 o'clock position in order to provides power to the starting motion; (3) Put left foot on the pedal and other foot on the ground; (4) Push off with foot on the ground while simultaneously standing on the raised pedal; (5) Keep both hands on the handlebar for optimum control. When first starting to ride, children should coast to a stop without pedaling.

Stopping

Stopping is an essential skill to avoid riding out into traffic from driveways and intersections and be able to avoid unexpected hazards. In order to stop safely use both hand brakes evenly (using only the front brake may cause the bike to flip over). If any bikes have coaster brakes demonstrate (or have student demonstrate) how to pedal backward to stop the bike.

Each year more than 500,000 people receive emergency room treatment for bike-related injuries, and more than half of these are children under age 14.

(Florida Traffic and Bicycle Safety Program, 1998)

Dismounting

Children should use the following procedure to stop and dismount the bike: (1) Slow the speed of the bike by applying the brakes; (2) As the bike nears a stop, slide forward off the seat and take your right foot off the pedal; (3) Lower the right foot toward the ground as the bike continues to slow; (4) At the moment the bike stops, right foot touches the ground.

Steering in a Straight Line

It is important to learn this skill because drivers do not expect bicyclists to weave as they approach from behind. Weaving into the path of a vehicle could cause a crash.

Follow All Traffic Laws

Bicycles are vehicles and bike riders are subject to the same traffic laws as motorists. Therefore, bicyclists must follow all traffic laws, including stopping at stop signs and red traffic lights (even when making a right turn).

Look to the Left, to the Right, and again to the Left

Before proceeding through an intersection or any other roadway crossing, bicyclists must look for other vehicles and pedestrians approaching from the left; look for vehicles and pedestrians approaching from the right; and then look for vehicles and pedestrians approaching from the left again. In addition, bicyclists should always check for vehicles that may be turning across their path from behind or ahead before crossing a driveway, alley or other intersection.



Scanning and Signaling

Bicyclists must look in front of, beside and behind themselves periodically so that they are aware of surrounding traffic. This is called scanning. It is important not to swerve in front of traffic when doing this maneuver. In order to maintain a straight riding line, the bicyclist needs to drop their opposite shoulder slightly when they look behind over their shoulder (most often, this involves dropping their right shoulder to look left). It is critical to scan before signaling and turning. After scanning, the bicyclist should signal, scan again, and then turn. To signal a right turn, extend your right arm to the side and point index finger to the right; to signal a left turn, extend your left arm to the side and point index finger to the left. To slow or to stop, extend your left hand down beside your left leg.

Avoiding Hazards

Hazards such as debris and potholes may not be detected by the bicyclist until they nearly hit them. If these objects are struck, the bicyclist may fall or cause a crash. If the bicyclist swerves widely and unexpectedly, the bicyclist may be struck by a vehicle from behind, so it is very important to maintain control of the bike and continue to ride in a straight line.

Establishing Eye Contact with Drivers

It is important to look drivers in the eye (not simply looking at the car, but looking at the driver) to check if they see you and check on what they may do. It is important to stress that drivers may not see you even if you stare at them, but it is important to try. You must establish eye contact at intersections, the end of driveways and other places where you may cross the path of a car. If you are not sure whether a driver sees you, stop. Go only when you are sure it is safe.

Do not Ride in the Dark

Children should never ride in the dark, even with a light. Adults who ride at night must (by law) use lights and still should use extreme caution. Vehicles do not expect bicyclists to be present in the dark and bicyclists are not visible to drivers, even though motor vehicle lights are visible to bicyclists.



Duval County, FL Health Department

5. Implementing the Maryland Pedestrian and Bicycle Safety Education Program

Students who are physically active, which includes walking and bicycling, and have good nutrition achieve higher test scores.

(Utah Department of Health, 2001)

5.1. Program Overview

The **Maryland Pedestrian and Bicycle Safety Education Program** is divided into two sections, a pedestrian safety program for kindergarten through second grade students and a bicycle safety program for third through fifth grade students. Both the pedestrian section and the bicycle section contain a set of four core lessons, which teach skills that are essential to developing a basic understanding of pedestrian and bicycle safety. If you have time, there are also enrichment exercises that are also important to basic pedestrian and bicycle safety knowledge and skills.

The pedestrian lessons are designed to be taught indoors or outdoors by classroom teachers through the Health Education Curriculum, or could also be covered in physical education class or another community setting. Many of the bicycle lessons are intended to be taught outdoors by physical education teachers through the Physical Education Curriculum or at community workshops, though some can be done in the classroom.

Pedestrian Program	Bicycle Program
Core Lessons	Core Lessons
1. Crossing Safely	1. Always Wear Your Helmet
2. Bus Safety	2. Preparing to Ride Safely
3. Crossing the Intersection	3. Learning About Traffic Laws and Hazards
4. Perils of the Parking Lot	4. Bike Skills I
Enrichment Exercises	Enrichment Exercises
5. Traffic in Tintown	5. Bicycling Near Home and Around the World
6. Neighborhood Walkabout	6. Bicycle Field Trip
7. Special Speaker	

These lessons are described in detail in the Lesson Handbook.



5.2. Lesson Plans

The Lesson Handbook contains plans for all the lessons, divided by grade level. Each lesson plan has a one-page outline listing:

- Instructional time
- Objectives
- Maryland Learner Outcomes
- Materials
- Tips for preparation
- Suggested teaching venue
- Lesson progression
- Vocabulary list
- Supportive statistics

The lessons also have a more detailed second page that walks you through the lesson activities. Many of the lessons contain activities targeted at specific grade levels, and the lessons taught to students build upon what they have learned in previous years. The handouts and graphics for each lesson are provided after the lesson outlines.

"Simply increasing helmet use will save lives and money."

—Steve McCloskey, Duval County, FL Health Department

5.3. Program Flexibility



Duval County, FL Health Department



The safety education program is designed so that it can be used by teachers, community leaders, educators, police, etc., with different levels of experience and can be adapted to meet the needs of children throughout Maryland. You are encouraged to teach all 10 lessons, but it is possible to teach the core lessons and the enrichment lessons that you feel are the most important, or to teach only the core lessons. The lesson plan format provides you flexibility by:

- Allowing you to glance through lessons and understand the key concepts quickly if you prefer to use your own approach to teach the material
- Giving you step-by-step instructions to follow if you have limited lesson preparation time
- Providing several choices for teaching venues including indoor classroom and outdoor settings
- Suggesting materials and equipment that can be used to enhance each lesson activity but allowing teachers to substitute or add other pamphlets, videos, posters or props
- Relating pedestrian and bicycle activities to other subjects, such as writing, mathematics, science and social studies
- Showing additional activities that can be added to the main lesson for more advanced grade levels

It is also possible for teachers to teach activities from lessons in the grade level above or below the target grade level. Yet, it is important that the core lesson activities are taught to each grade every year because the lessons in the upper grades build on what was learned the year before. Repeated instruction will help students remember more of the knowledge and skills that they need to be safe pedestrians and bicyclists.

The ultimate goal of each lesson is for the students to learn the rules and skills needed to be safe pedestrians and bicyclists. Therefore, at the end of each lesson, it is important to summarize what was taught and to remind students that what they have learned will make their walking and bicycling experiences outside of school more fun and safe.



Duval County, FL Health Department



5.4. Program Coordinator

School systems across the country have found that, because the program requires unique equipment, the best way to implement it is to designate an overall coordinator. This person can help transport the program trailer between schools, load and unload equipment and help you take inventory of the materials inside. Contact the Maryland Highway Safety Office for more details about how this position can be supported. It may be possible for your school system to partner with a civic group, bike club or receive assistance through the Maryland Highway Safety Office Community Traffic Safety Program. Further, this coordinator can offer assistance by helping with lesson activities (such as helmet fit).

Whether or not your program has a coordinator, you will need *at least* one other adult to help with the bicycle lessons because of the student activities and set-up and take down of equipment.

5.5. Maryland Learner Outcomes

Extensive research has been done to ensure that the program supports educational goals set by the Maryland Department of Education. The objectives of the program lessons are built on the Maryland Learner Outcomes (MLOs). While this Teacher's Guide provides a few key MLOs for the program, each lesson outline in the Lesson Handbook provides MLOs that are specific to each lesson. Check the copies of the Maryland Learner Outcomes at your school for additional applicable outcomes.

KEY MARYLAND LEARNER OUTCOMES

A few of the key Maryland Learner Outcomes that are incorporated into this program include:

- Health, Safety and Injury Prevention (K-3): There are behaviors, such as taking precautions and following rules, that are basic to safe daily living.
- Health, Health Behaviors (K-3): Demonstrate skills to improve or maintain personal health.
- Social Studies, Geography (PreK-3): Explain why some locations are better than others for specific human activities.
- Writing, Writing to Inform (PreK-3): Students will demonstrate their ability to write to inform by developing and organizing facts to convey information.
- Health, Safety and Injury Prevention (4-5): There are ways to eliminate or modify specific hazardous situations.
- Health, Goal Setting and Decision Making (4-5): Predict how decisions regarding health behaviors have consequences for self and others.
- Social Studies, Geography (4-5): Construct and interpret maps using map elements.



Because this is a safety education program, most of the lesson objectives have to do with the Maryland Learner Outcomes related to health. However, the lesson activities also incorporate skits, writing assignments, songs, mapping activities, discussions of economic concepts and mathematical calculations. This variety of activities makes it easy for you to integrate the Maryland Pedestrian and Bicycle Safety Education Program into the overall curriculum.

5.6. Lesson Contents

The four core lessons in the pedestrian and bicycle program (reinforced in each grade level) are:

Pedestrian Core Lessons	Objectives
1. Crossing Safely	To learn the steps in crossing a street (stopping at the curb; finding the edge; looking to the left, to the right, and again to the left; and continuing to scan for traffic while crossing).
2. Bus Safety	To understand how to wait for the bus, enter and exit the bus, and cross the street near the bus safely.
3. Crossing the Intersection	To learn the differences between crossing the street and crossing at an intersection, including looking behind for traffic.
4. Perils of the Parking Lot	To learn the basic concepts needed to be a safe pedestrian in a parking lot (getting in and out of a car safely, and where to walk safely in a parking lot).

Bicycle Core Lessons	Objectives
1. Always Wear Your Helmet	To understand the importance of always wearing a helmet and to learn how to fit a helmet properly (be able to check the five steps).
2. Preparing to Ride Safely	To learn how to perform safety checks before riding and to practice getting on and off and stopping a bicycle safely.
3. Learning About Traffic Laws and Hazards	To learn the meaning of stop and yield signs, stop lights, bike lanes, and to recognize common bicycling hazards (debris, darkness, wet roads, etc.)
4. Bike Skills I	To practice skills such as controlling a bicycle and scanning for traffic.



The basic objectives of the bicycle lessons are taught in third grade. The lessons in the following years will add skills and concepts that build upon these lessons.

The enrichment exercises are flexible so that one or more them can be taught each year after the core lessons are covered. Teachers can also use lessons for any of the three grade levels (kindergarten, first grade, and second grade for pedestrian and third, fourth and fifth grade for bicycle), depending on the ability of students. See Sections 2 and 3 of this Teacher's Guide for a list of lesson objectives by grade level.

Pedestrian Enrichment	Objectives
5. Traffic in TINYTOWN	To practice safe pedestrian practices learned over the year.
6. Neighborhood Walkabout	To experience crossing streets and intersections with the teacher in a real-life situation.
7. Special Speaker	To review pedestrian safety concepts with a community leader.

Bicycle Enrichment	Objectives
5. Bicycling Near Home and Around the World	To understand that bicycles are used around the world for transportation and recreation and that learning to ride safely is essential.
6. Bicycle Field Trip	To experience bicycling safely and legally in a real-life situation.

5.7. Lesson Timing

The outdoor lessons are ideal for September through November and March through June. The indoor classroom lessons may work best during the first few weeks of the school year or during winter months.

5.8. Sticking to the Program

Though the program is designed to provide flexibility for you to use your own style to teach the lessons, it is important to teach at least the core lessons to each grade level each year. Lessons in the upper grade levels build on the core lessons that were taught the year before. Repeated instruction will help students remember more of the knowledge and skills that they need to be safe pedestrians and bicyclists.



"If there is one single most important aspect of the program, it is the effort of individual teachers. Teachers' enthusiasm is what makes it happen."

*Jan Tipton,
Physical Education Teacher*

6. Class Management Principals

6.1. Rules

This section suggests some guidelines that will help keep the activities orderly, but still fun for all students. Therefore, it is necessary to set rules for the program. Make sure to state these rules at the beginning of the program and at the beginning of each lesson. It is important to explain that there are reasons (such as safety and equipment maintenance) for the rules and the consequences that follow if the rules are broken.



Toole Design Group

Some rules are suggested below.

SUGGESTED RULES FOR PEDESTRIAN AND BICYCLE LESSONS

1. No running.
2. No skidding "on purpose" on your bike.
3. No dropping bikes (always use a kickstand).
4. No "popping wheelies."
5. No throwing helmets.
6. No hanging helmets on handlebars.
7. Students should always raise their hand before speaking and speak one at a time.
8. Students may critique other students for learning purposes, but should offer positive comments and only constructive criticism.
9. Horseplay will not be tolerated.

It is also good idea to have children organize into groups at the beginning of the activity and have students stand in lines before taking a turn walking or riding during an activity. You may also want to blow a whistle when a student is breaking the rules, and to have consequences for breaking the rules.





Duval County, FL Health Department

6.2. Students who do not know how to Ride a Bicycle

Most students in third, fourth, and fifth grade will already know how to ride a bicycle. However, there may be a few students who will need special assistance to learn basic balancing and pedaling skills. Be aware that it may be embarrassing for them to admit that they do not know how to ride around other students. You may choose to offer bike lessons to these students during recess, after school, or at other times away from class to give them individualized attention (parent volunteers may be able to help with this).

There are several ways to allow students who can not ride to participate in the bicycling activities. First, you may ask parent or community volunteers to assist with the lessons. If there are students in a class that do not know how to ride, these helpers can take them to a nearby location (or a paved area on school property) and practice pedaling and balance. This individualized instruction will help bring them closer to the skill level of other students. If volunteers are not available, the students who have not learned to ride yet can hold the cut-out cars or act as “police” observers.

6.3. Ideas for Students Who Are Waiting or Not Doing an Activity

In some of the lessons there may be times where one group of students is doing an activity, but other students are waiting. In this case, the students who are not directly involved in the activity can perform skits or go through a box of index cards with questions and answers related to pedestrian and bicycle safety.



7. Materials Needed for the Program



Duval County, FL Health Department

You can quickly find out what materials will be needed for each lesson by looking at the lesson outline (first page of each lesson in the Lesson Handbook). Most of the overheads, graphics, and handouts for each lesson are included after the lesson plan. Some lessons require props and equipment, as described below. Though much of the equipment is provided, you should also feel free to make and use your own props.

If you will be implementing the entire pedestrian program, you will need the program video; setup materials, such as chalk, tape and cones; markers and paper; and traffic signs and other props (these can be copied from the Lesson Handbook, laminated, and re-used each year).

If you will be implementing all of the bicycle lessons, you will need the program video and a program equipment trailer, which includes enough bicycles and helmets for a class, props such as wooden car cut-outs, and setup materials such as chalk, ropes and cones. Equipment trailers may be available through the Maryland Highway Safety Office. Or, your school can group with other nearby schools to purchase materials and share a trailer. Another option is to collect your own equipment for use in the program.

The following materials would be included in a typical equipment trailer:

- Bicycles (2 sizes) (30)
- Helmets (3 sizes) (100)
- Trash cans to store helmets (3)
- Wooden props
- Traffic cones (10)
- Storage containers (4)
- Tool kit
- Bike pumps (2)
- 50' ropes (14)
- Bean bags (12)
- Chalk (large bucket)
- Line marker and paint





Duval County, FL Health Department

The trailer contains items that are used mostly in the bicycle lessons, but some of the materials in the equipment trailer can also be used for the pedestrian lessons.

Though helmets are provided, it is strongly recommended that children bring their own helmets so that they can become familiar with adjusting the helmet they will normally use. If students use the helmets that are

provided, it is necessary for teachers to clean the helmets and have the children wear surgical caps underneath the helmets to prevent the spread of lice. It may be necessary to clean the helmets periodically using water and a light shampoo or light-duty detergent.

In some cases, students may not be able to ride a regular bicycle. If you have students with physical disabilities, it is possible to purchase a tricycle or other mobile device through a special education program grant or other funding source.

Because the program is flexible, it may be possible to do only the indoor lessons or skip some of the lessons that require a large amount of materials and setup time. However, you are encouraged to teach all the lessons to provide the greatest benefit to students.

Whenever you use the program bicycles, you and your students should check them for potential problems before riding. Checklists listing the equipment (see Section 8.2) can be filled out when you start and finish the lessons for the year. Bikes with mechanical problems should be flagged for repairs.

7.1. Bicycle Helmet Sales

One of the ways to make sure students have helmets and increase community interest in the **Maryland Pedestrian and Bicycle Safety Education Program** is to organize a bicycle helmet sales campaign. This campaign can be organized by the local PTA, a school booster club or other community group. If other schools close to yours are interested, it may be efficient to have the helmet sales campaign organized for more than one school (the county program coordinator may be able to help with this effort). Typically, the campaign organizers purchase the helmets in bulk and then sell them at a reduced price to students. To do this, helmet sales tables can be set up in the school hallway for students have their heads measured and then fill out an order form. Since the helmets can be purchased in bulk from a major manufacturer, they can be purchased for \$8 to \$10 and then offered to students for about \$5. Though helmets are not offered for free initially, PTAs and other groups can be encouraged to buy helmets to donate to children in need. Another option is to develop a scholarship program for helmets. No child should go without a helmet because he or she is unable to pay for it. Therefore, a helmet sales campaign involves the community and encourages students to have their own helmets to wear when riding outside of school time.



Duval County, FL Health Department

8. Time-Saving Tips



Duval County, FL Health Department

Typically, setting up bikes, lanes, cones, bean bags, etc., for lessons takes about 10-15 minutes (with two people). Though two people can set up the equipment, you are encouraged to use more volunteers because they can help manage props and observe students during the activities. Parents, retired community members, local bicycle advocates, PTA members, and local police and fire personnel can all make good volunteers. A volunteer can help unload equipment from the trailer in the morning and assist with some lessons. It is suggested that you set up for outdoor activities before the school day starts. The following is a list of a few ways you can save time during setup and instruction:

- Plan to do the “Traffic in TINYtown” pedestrian activity when the bicycle trailer is at your school. By making arrangements in advance, you may be able to have your volunteers set up the TINYtown activity.
- The helmet fit lesson typically takes longer than the other lessons. If you have multiple classes, you may want to do the egg drop, melon drop, or brain mold demonstration at lunch.
- The outdoor bicycle activities will run more smoothly (students will be able to put on helmets and line up more quickly) if students have already done the helmet fit lesson.
- Make sure that you can do all the helmet adjustments quickly when demonstrating the five steps to proper helmet fit.
- If a video is shown along with the helmet lesson, you and the parent volunteers can go around to the students and help adjust their helmets while it is playing.
- Have indoor classroom lessons prepared at the beginning of the course (have materials and props on hand) so that they can be substituted at any time for outdoor lessons if the weather is bad. The indoor lessons can also be done during the winter.



- Integrate pedestrian and bicycle concepts into other writing, reading, mathematics, science and social studies lessons. For example, to teach the “Crossing the Street Song,” you may want to consult with a music teacher to have them incorporate it during music class.
- Have the last class of the day take all of the bicycles and equipment over to the trailer. This will make loading the equipment onto the trailer go much faster each evening.



Toole Design Group

9. Promoting the Maryland Pedestrian and Bicycle Safety Education Program

The most critical factor in the success of the Maryland Pedestrian and Bicycle Safety Education Program is your enthusiasm. Teachers who are positive and energetic make the students enjoy and learn more from each lesson. If you have enthusiasm during promotional events and when talking with other teachers, administrators and parents, the program will more likely be received in a positive way. The other promotional ideas listed in this section cannot substitute for your own desire to help make students safe pedestrians and bicyclists.

Regular exercise, including walking and bicycling reduces the risk of coronary heart disease, stroke and other chronic diseases, which result in lower health care costs.

(Pedestrian and Bicycle Information Center, 2002.)



9.1. Student and School Achievement Awards

It is important to recognize the success of individual students and of the program as a whole at each school so that people feel positive about their experience with the program. One way to recognize student achievement is by awarding a certificate of completion to all students who complete all core lessons. To increase community awareness of the achievement of the school as a whole, the local or county government can make a Bicycle Safety Helmet Proclamation or designate a Pedestrian and Bicycle Safety Awareness Week. Templates for both of these documents can be found in Section 10 of this Teacher's Guide. Alternatively, the school board and superintendent could make these proclamations.

9.2. Parent and Community Support



Toole Design Group

It is a good idea to ask for parent assistance with some of the lessons. This will involve parents directly with implementation, making them more likely to voice support for the program in the community. In addition, they can make equipment set-up and your job of teaching the lesson much easier. If there are

some students in your class who do not know how to ride a bicycle, these parent and community volunteers can give them individual attention. They may also be able to help with special after school or weekend classes for giving beginning riding lessons to kids who don't know how to ride.

Some important supporters can come from the state patrol, county sheriff's office and local police department; the county or local transportation department; the county education department; the local PTA and local Safe Kids coordinators. In general, community support from parents, neighborhood organizations, health care organizations, local government and law enforcement agencies and other local groups is important for building a successful program. These groups will be interested in improving the safety of children, but at first they may not be aware of the program or understand how the program will help achieve this common goal. If they learn about and support the program, they may be willing to donate money, volunteer time, provide materials and props, write articles in newsletters and assist with further promotion. Most importantly, if the community as a whole learns about the program and feels positive about it, children will have a more enjoyable experience while they participate in the lessons.

Below is a list of some of the ways that you can promote the **Maryland Pedestrian and Bicycle Safety Education Program**:

- Sponsor public service announcements on TV or the radio related to the program or pedestrian and bicycle safety in general.
- Have the last day of the bicycle unit be a bicycle play day that involves the local police.
- Write news releases about the program to the local paper.
- Write an article for a local company or neighborhood newsletter about the program.
- Attend PTO or PTA meetings and spread the news about the program.
- Ask the PTO or PTA to donate money, materials or volunteers to the program; i.e., organize and sponsor a helmet sale.
- Ask the PTO or PTA to lobby for state and local funds for the program.
- Gather donations to begin a scholarship program to provide bicycles and helmets to children who need assistance purchasing them.
- Conduct a trip survey at your school to find out how many children walk, bus, bike or are driven to school. Share the results with the neighborhood or community newspaper.
- Have students work with their parents to draw their route to school (by any mode) on a map of the surrounding area and then have them point out hazards and ideas to make the journey safer for pedestrians and bicyclists. Share the results with the local police and transportation planning departments.
- Set up a booth at a prominent point in your neighborhood or community to answer questions about pedestrian and bicycle safety. Provide lemonade or other refreshments and have a bike, helmet, pictures of pedestrian signals, etc., on hand to use as visual aids.
- Contact your local transportation planning and engineering department to find out if there are plans to improve pedestrian and bicycle facilities near your school and mention how the program can complement these improvements.
- Participate in International "Walk Our Children to School Day."
- Hold parent "walk pick-ups" or "Bike-to-School" nights so that parents can meet their children to walk or bike home together safely.
- Sponsor a helmet campaign in the school or community. Take a survey of the percentage of bicyclists who are wearing helmets at a random location near the school and post the results in the school or local newspaper.
- Organize a bicycle rodeo with the help of law enforcement organizations, parents or community organizations outside of school after the program is completed so that students can show off their skills to parents and police officers.
- Host a pedestrian and bicycle safety education training session for interested teachers and community members several times each year.
- Organize walking-pools and bicycling-pools within neighborhoods so that children can journey to school in groups.
- Have a police officer, town council member or mayor come in to talk to a class or an assembly of students about pedestrian and bicycle safety.



- Ask the police department to provide bicycle patrols around the school area before and after school.
- Bring in a professional bicyclist or runner to talk about pedestrian and bicycle safety.
- Help start a formal crossing guard or safety patrol training program.
- Integrate pedestrian and bicycle safety concepts into other school subjects.
- Involve local bicycle shops and shoe stores with the program by having them participate in campaigns to donate helmets and walking shoes, make school presentations, or welcome class field trips.
- Explore the Bike Resources section of the Earth Force Program (see <http://www.earthforce.org/resources.cfm?page=resources2.cfm>)

More walking and bicycling to school means fewer parents driving students to school and vehicles idling and producing exhaust in front of the school.

9.3. Documenting Effectiveness

It is important to show the value of the Maryland Pedestrian and Bicycle Safety Education Program to school administrators, the local community, and other school districts that may be considering the program. Collecting information to document the effectiveness of the program at your school will be beneficial for you, but it will also be valuable to the Maryland Highway Safety Office. The future funding and success of the program depends on demonstrating its value to students and to the community. Therefore, we would greatly appreciate if you do some of the evaluation methods in this section and then share the results with the Maryland Highway Safety Office. The evaluation methods include participation records, parent surveys, pre- and post-tests, student travel surveys and behavioral observations.

Please send your results to:

Maryland Highway Safety Office
State Highway Administration
Pedestrian and Special Programs Coordinator
7491 Connelley Drive
Hanover, MD 21076
Phone: 410-787-4050
Fax: 410-787-4020

If applicable, you may also send your results to the Program Coordinator in your county. It is preferred that you send all the documents from your school in one package. The results will be analyzed and given back to your school and also used by the Maryland Highway Safety Office.



Documenting the total number of students in the program is one measure of effectiveness. This form will help you keep track of the number of pedestrian and bicycle lessons that were taught, the total number of students who participated in the indoor and outdoor lessons, and the average number of minutes of instruction that the students received for each lesson.

Grade Levels Taught: _____

[illegible]

Maryland Highway Safety Office, State Highway Administration
Pedestrian and Special Programs Coordinator • 7491 Connelley Drive, Hanover, MD 21076
Phone: 410-787-4050 Fax: 410-787-4020



9.3.2. Parent Survey

A second evaluation method is to mail or send a parents' survey home with students. The survey asks questions about parents' impressions of the program. By filling out the survey, parents can share their opinions about the program and if they have heard their children talk about or seen them demonstrate safer pedestrian and bicycle behavior because of the program.

Maryland Pedestrian and Bicycle Safety Education Program – Parent Survey

Please give us your feedback about the Maryland Pedestrian and Bicycle Safety Education Program. We would like ask you to answer the following questions and send this form back to your child's teacher.

County: _____

Teacher Name: _____

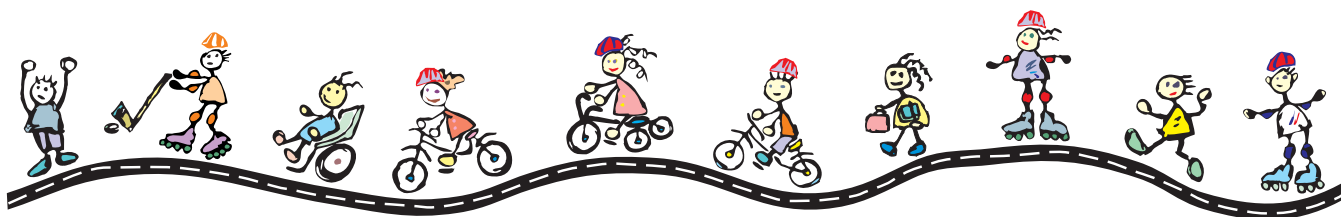
Child's Grade Level: _____

1. Had you heard about the **Maryland Pedestrian and Bicycle Safety Education Program** before your child began participating in the lessons? ___Yes ___No
2. Has your child talked about any of the lessons or what he or she has learned from the activities?
___Yes ___No. If so, please list one or two of the things talked about.
3. Have you seen your child demonstrate safer pedestrian or bicycle behavior since the beginning of the program (i.e. stopping at the edge of the street; looking left, right, and left again before crossing; wearing a bicycle helmet; riding his or her bicycle on the right side of the street; etc.)?
___Yes ___No. If so, please describe the behavior that has improved.
4. Do you think that the program has been valuable for your child?
___Yes ___No. Please list any comments.
5. Please list any topics or activities that you would like to see covered in the Pedestrian and Bicycle Safety Program.)

Please send your results to:

Maryland Highway Safety Office, State Highway Administration
Pedestrian and Special Programs Coordinator • 7491 Connelley Drive, Hanover, MD 21076
Phone: 410-787-4050 Fax: 410-787-4020





9.3.3. Pedestrian Program Pre- and Post-Tests for Students

You can give a brief pre-test to your students on pedestrian safety concepts before teaching Lesson 1 and then again after the last lesson at each grade level. These tests can be given to kindergarten students verbally. The pedestrian pre-test is provided on the following page.

Pedestrian Safety Evaluation Form

Your Name: _____

Your Teacher's Name: _____

Your School's Name: _____

Your County's Name: _____

Date: _____

Please answer the questions below. Check YES or NO to show your answers.

1. Is it okay to chase a ball into the street if there are no cars parked in the street? YES ☐ NO ☐
2. Should you look to the left, to the right, and again to the left to make sure that there are no vehicles coming before you cross the street? YES ☐ NO ☐
3. When you exit the bus, should you walk close to the side and the front of the bus? YES ☐ NO ☐
4. Should you be careful in parking lots, even when most of the cars are turned off? YES ☐ NO ☐
5. Is a person who walks or uses a cane or a wheelchair on the sidewalk called a "pedestrian"? YES ☐ NO ☐
6. Is it okay to run across the street if you are with a group of friends? YES ☐ NO ☐
7. If a pedestrian signal shows a steady "DON'T WALK" symbol, should you wait to cross the street until the signal shows "WALK"? YES ☐ NO ☐
8. Is it important to look behind yourself for traffic at an intersection because a car may come from behind and turn into your path as you cross? YES ☐ NO ☐
9. Is it easy for drivers to see a person wearing dark clothing while walking at night? YES ☐ NO ☐
10. Is it okay to cross the street from in between two parked cars? YES ☐ NO ☐
11. Is it okay to walk diagonally across the street? YES ☐ NO ☐
12. Should you continue to scan to the left and to the right to look for approaching cars as you cross the street? YES ☐ NO ☐
13. If you are crossing at a marked crosswalk where cars are supposed to stop for people walking across the road, is it still important stop at the edge and look to the left, to the right, and again to the left for traffic? YES ☐ NO ☐

Please send your results to:

Maryland Highway Safety Office, State Highway Administration
Pedestrian and Special Programs Coordinator • 7491 Connelley Drive, Hanover, MD 21076
Phone: 410-787-4050 Fax: 410-787-4020





Pedestrian Safety Evaluation Form (Answer Key)

Your Name: _____

Your Teacher's Name: _____

Your School's Name: _____

Your County's Name: _____

Date: _____

Please answer the questions below. Check YES or NO to show your answers.

1. Is it okay to chase a ball into the street if there are no cars parked in the street? YES ☐ NO ☒
2. Should you look to the left, to the right, and again to the left to make sure that there are no vehicles coming before you cross the street? YES ☒ NO ☐
3. When you exit the bus, should you walk close to the side and the front of the bus? YES ☐ NO ☒
4. Should you be careful in parking lots, even when most of the cars are turned off? YES ☒ NO ☐
5. Is a person who walks or uses a cane or a wheelchair on the sidewalk called a "pedestrian"? YES ☒ NO ☐
6. Is it okay to run across the street if you are with a group of friends? YES ☐ NO ☒
7. If a pedestrian signal shows a steady "DON'T WALK" symbol, should you wait to cross the street until the signal shows "WALK"? YES ☒ NO ☐
8. Is it important to look behind yourself for traffic at an intersection because a car may come from behind and turn into your path as you cross? YES ☒ NO ☐
9. Is it easy for drivers to see a person wearing dark clothing while walking at night? YES ☐ NO ☒
10. Is it okay to cross the street from in between two parked cars? YES ☐ NO ☒
11. Is it okay to walk diagonally across the street? YES ☐ NO ☒
12. Should you continue to scan to the left and to the right to look for approaching cars as you cross the street? YES ☒ NO ☐
13. If you are crossing at a marked crosswalk where cars are supposed to stop for people walking across the road, is it still important stop at the edge and look to the left, to the right, and again to the left for traffic? YES ☒ NO ☐





9.3.4. Bicycle Program Pre- and Post-Tests for Students

You can give a brief pre-test to your students on bicycle safety concepts before teaching Lesson 1 and then again after the last lesson at each grade level.

Bicycle Safety Evaluation Form

Your Name: _____

Your Teacher's Name: _____

Your School's Name: _____

Your County's Name: _____

Date: _____

Please answer the questions below. Make an "X" in the box or circle YES or NO to show your answers.

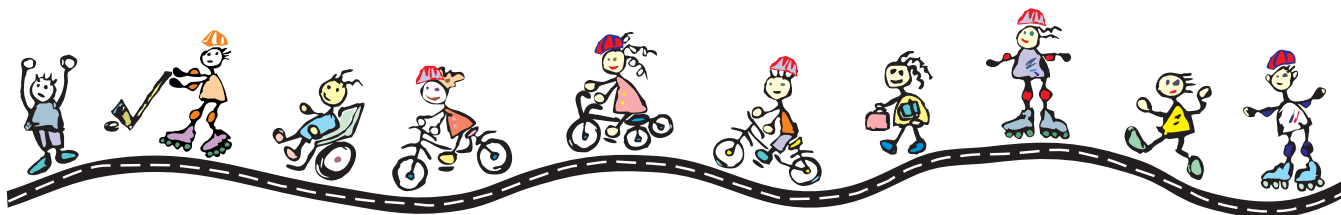
1. Do you have a bike? YES ☐ NO ☐
2. How often do you ride your bike to school? ☐ a. everyday ☐ b. most days ☐ c. sometimes ☐ d. never
3. Do you have a bike helmet? YES ☐ NO ☐
4. When riding your bike, do you wear a helmet? ☐ a. always ☐ b. sometimes ☐ c. never
5. If you wear a bike helmet sometimes or never, why don't you always wear a helmet?

6. Is it okay to ride a bike that is too big for you now, so you grow into it next year? YES ☐ NO ☐
7. Is it okay to ride a bike that doesn't have good brakes if you are careful? YES ☐ NO ☐
8. Do you need to have lights on your bike at night if you already have reflectors? YES ☐ NO ☐
9. Can a bicyclist safely carry packages in one hand while steering with the other? YES ☐ NO ☐
10. A good example of a biking surface hazard is: ☐ a. a puddle of water in the road
☐ b. a stop sign at an intersection ☐ c. a group of people waiting at a bus stop
11. Should bicyclists obey the same traffic laws, signs and signals as car drivers when riding on the street? YES ☐ NO ☐
12. Should bicyclists ride against traffic so that they can see cars coming toward them? YES ☐ NO ☐
13. Before entering a roadway should a bicyclist stop and look to the left, to the right, and then left again? YES ☐ NO ☐
14. Is it okay for a bicyclist to just slow down, look and then keep going through a stop sign without coming to a complete stop? YES ☐ NO ☐
15. Should a bicyclist yield to pedestrians on sidewalks and crosswalks? YES ☐ NO ☐
16. Should a bicyclist give hand signals before turning? YES ☐ NO ☐



17. Is it safe to cross the street between two parked cars? YES ☐ NO ☐
18. Can car drivers see you better if you are wearing brightly colored clothes? YES ☐ NO ☐
19. Is it easy for car drivers to see children on small bikes? YES ☐ NO ☐
20. If you are wearing a helmet, is it okay not to scan over your left shoulder for traffic? YES ☐ NO ☐
21. Is it important for bicyclists to keep looking and listening for cars as they cross the street? YES ☐ NO ☐





Bicycle Safety Evaluation Form (Answer Key)

Your Name: _____

Your Teacher's Name: _____

Your School's Name: _____

Your County's Name: _____

Date: _____

Please answer the questions below. Make an "X" in the box or circle YES or NO to show your answers.

1. Do you have a bike? YES ☐ NO ☐
2. How often do you ride your bike to school? ☐ a. everyday ☐ b. most days ☐ c. sometimes ☐ d. never
3. Do you have a bike helmet? YES ☐ NO ☐
4. When riding your bike, do you wear a helmet? ☐ a. always ☐ b. sometimes ☐ c. never
5. If you wear a bike helmet sometimes or never, why don't you always wear a helmet?

6. Is it okay to ride a bike that is too big for you now, so you grow into it next year? YES ☐ NO ☒
7. Is it okay to ride a bike that doesn't have good brakes if you are careful? YES ☐ NO ☒
8. Do you need to have lights on your bike at night if you already have reflectors? YES ☒ NO ☐
9. Can a bicyclist safely carry packages in one hand while steering with the other? YES ☐ NO ☒
10. A good example of a biking surface hazard is: ☒ a. a puddle of water in the road
☐ b. a stop sign at an intersection ☐ c. a group of people waiting at a bus stop
11. Should bicyclists obey the same traffic laws, signs and signals as car drivers when riding on the street? YES ☒ NO ☐
12. Should bicyclists ride against traffic so that they can see cars coming toward them? YES ☐ NO ☒
13. Before entering a roadway should a bicyclist stop and look to the left, to the right, and then left again? YES ☒ NO ☐
14. Is it okay for a bicyclist to just slow down, look and then keep going through a stop sign without coming to a complete stop? YES ☐ NO ☒
15. Should a bicyclist yield to pedestrians on sidewalks and crosswalks? YES ☒ NO ☐
16. Should a bicyclist give hand signals before turning? YES ☒ NO ☐
17. Is it safe to cross the street between two parked cars? YES ☐ NO ☒
18. Can car drivers see you better if you are wearing brightly colored clothes? YES ☒ NO ☐
19. Is it easy for car drivers to see children on small bikes? YES ☐ NO ☒





20. If you are wearing a helmet, is it okay not to scan over your left shoulder for traffic? YES ☐ NO ☒
21. Is it important for bicyclists to keep looking and listening for cars as they cross the street? YES ☒ NO ☐





9.3.5. Student Travel Survey

This survey can be done by asking students to raise their hands, or the numbered questions can be modified, copied and handed out. An alternative to the informal in-class survey is to send a survey home to parents (with students or by mail) and have them report their children's travel patterns and describe dangerous locations.

Student Travel Survey

County name: _____

Teacher name: _____

Total number of students in the class: _____ Date: _____

1. Find out how students traveled to school today: How many students:

- ___ Rode the bus?
- ___ Rode their bicycle?
- ___ Walked?
- ___ Were driven to school by a parent/guardian?
- ___ Other?

2. Within the last two weeks, how many students have:

- ___ Bicycled to school?
- ___ Walked to school?

3. When riding to school, how many students wear their bicycle helmets:

- ___ Never?
- ___ Sometimes?
- ___ Often?
- ___ Always?

4. When riding in their neighborhood or around town, how many students wear their bicycle helmets:

- ___ Never?
- ___ Sometimes?
- ___ Often?
- ___ Always?

5. How many students live:

- ___ Within 1/2 mile of school?
- ___ Between 1/2 mile and 1 mile of school?
- ___ Between 1 mile and 2 miles of school?
- ___ Further than 2 miles from school?

6. What are some of the dangerous locations for pedestrians and bicyclists near school?

Have students list several: _____

Please send your results to:

Maryland Highway Safety Office, State Highway Administration
 Pedestrian and Special Programs Coordinator • 7491 Connelley Drive, Hanover, MD 21076
 Phone: 410-787-4050 Fax: 410-787-4020





Student Travel Survey for Parents to Fill Out

We would appreciate your input about your child walking and bicycling to school. Please fill in the following information about your child's travel patterns and describe dangerous locations near their school.

County Name: _____

Teacher Name: _____

Child's Name: _____

Date: _____

1. How does your child get to school most often (check one):
☐ Riding the bus ☐ Riding their bicycle ☐ Walking ☐ Riding in a car driven by a parent/guardian
☐ Other _____
2. Within the last two weeks, how many times has your child (enter answers in both blanks):
☐ Bicycled to school ☐ Walked to school
3. When riding to school, how often does your child wear a bicycle helmet?:
☐ Never ☐ Sometimes ☐ Often ☐ Always
4. When riding in their neighborhood or around town, how often does your child wear a bicycle helmet?:
☐ Never ☐ Sometimes ☐ Often ☐ Always
5. How far away from school do you live:
☐ Within 1/2 mile ☐ Between 1/2 mile and 1 mile
☐ Between 1 mile and 2 miles ☐ Further than 2 miles from school?
6. What are some of the dangerous locations for pedestrians and bicyclists near school?
 Have students list several: _____

Please send your results to:

Maryland Highway Safety Office, State Highway Administration
 Pedestrian and Special Programs Coordinator • 7491 Connelley Drive, Hanover, MD 21076
 Phone: 410-787-4050 Fax: 410-787-4020





9.3.6. Behavioral Observations

A final way to show results from the program is to observe student behaviors outside of the school. To do this, parent volunteers, teachers, or other data collectors can observe for one hour before the program begins and then at the end of the year to find the percentage of children who (any number of the following can be observed):

- Stop at the edge of the street before crossing
- Look left-right-left for traffic at mid-block crossing locations and left-right-left and behind at intersections
- Scan left and right to look for traffic while crossing the street
- Walk (not run) across the street
- Wear bicycle helmets
- Stop at stop signs on their bicycle and look left-right-left and behind
- Ride on the correct side of the road
- Check over their shoulder for traffic

Note that it may take several years before major changes in behavior can be observed at a schoolwide level. During the first year of the program, each student will have participated in the lessons only once; by the second year all students except kindergarteners will have received most of the core safety concepts twice. This behavioral observation form is provided on the following page.



County name: _____

School: _____

Observer's Name _____

Date: _____ Time of Day of Observation Period: _____

Temperature: _____

Weather Conditions (sunny, cloudy, rainy, etc.): _____

Maryland State Highway Administration Office
Maryland Highway Safety Office
Pedestrian and Special Programs Coordinator
7491 Connelley Drive
Hanover, MD 21076
Phone: (410)787-4050 Fax: (410)787-4020
www.sha.state.md.us/ooots/ooots.htm

[illegible]

10. Additional Resources

10.1. Announcement about the program for Parents/Guardians

The following announcements telling parents about the **Maryland Pedestrian and Bicycle Safety Education Program** can be modified for teaching the program at your school. These announcements should be sent home with students shortly before the lessons begin.





Our children have become "mobility dependent." Almost 75 percent of all trips made by 5-9 year olds, and 65 percent of all trips by 10-15 year olds are made as passengers in private vehicles. About half of America's school children ages 5-15 go to school in this fashion, while another third take the school bus. Only 10 percent walk to school, and less than 2 percent ride a bike.

(Nationwide Personal Transportation Survey, 1995)

10.1.1. Announcement about the Pedestrian Safety Education Program



Duval County, FL Health Department

Look at what we will be learning through the **Maryland Pedestrian Safety Education Program**!

Our class will soon be starting the **Maryland Pedestrian Safety Education Program** at (Name) Elementary School. We will be learning about how to be safe pedestrians when crossing streets and intersections, waiting for the

bus, and walking through parking lots. Some of the skills that we will learn through activities and skits include stopping at the edge before crossing the street and looking to the left, to the right, and again to the left before crossing. We will even learn about safe and unsafe places to cross the street and about colors of clothes that make it easier for drivers to see us. A police officer or other safety expert may even come in to talk with our class about being safe pedestrians!

The teachers will remind us that even though we are learning to be safe pedestrians, we will still need an adult to help us cross streets. During the program, I will be bringing home several activities to talk about with you. Together, we can look at crosswalks in our neighborhood and watch pedestrians and drivers at a busy intersection. The activities we do in class and at home will help us learn how to be safe pedestrians. They will also teach us how it is healthy to walk for exercise and give us the skills to keep from getting injured from vehicles. And, of course, they will be fun!





10.1.2. Announcement about the Bicycle Safety Education Program

Look at what we will be learning through the **Maryland Bicycle Safety Education Program**!

Our class will soon be starting the Maryland Bicycle Safety Education Program at (Name) Elementary School. We will be learning about how to be safe bicyclists while riding around the neighborhood, to school, and in other places. Most

importantly, we will learn to always wear a helmet when we bicycle. In physical education class we will get to practice safe riding skills, like stopping, scanning behind for traffic, signaling, turning, and we will learn about rules of the road and hazards that can cause bicyclists to get hurt. A police officer or other safety expert may even come in to talk with our class about being safe bicyclists!

During the program, I will be bringing home several activities to talk about with you. Together, we can map a safe route that I could use to bicycle to school or to the store. We can also observe drivers at a busy intersection. The activities we do in class and at home will help us learn how to be safe bicyclists. They will also teach us how it is healthy to bicycle for exercise and give us the skills to keep from getting injured from falls and from collisions with vehicles. And, of course, they will be fun!



10.2. Review of what Students Learned in the Program for Parents/Guardians

The sections below can be modified and copied to tell parents about what students learned through the core lessons of the **Maryland Pedestrian and Bicycle Safety Education Program**. These announcements should be sent home with students as soon as the core lessons are completed.





In the United States, 16% of trips made by children between ages 5 and 15 were done by walking or biking in 1977. This percentage decreased to 14% by 1990 and 10% by 1995.

(Insurance Institute for Highway Safety, 1999)

10.2.1. Review of what was learned in the Pedestrian Safety Education Program

Look at what we learned during the Maryland Pedestrian Safety Education Program!

We talked about being safe pedestrians, watched videos, and participated in activities in the classroom and at home. Some of the things that we learned about were:

- Stopping at the edge before crossing the street.
- Finding a better place to cross the street if there is a visual barrier, like a car
- Looking to the left, to the right, and again to the left for traffic.
- Crossing only when it is safe, and scanning to the left and to the right for vehicles while crossing
- Walking in a straight line from one side of the street to the other side.
- Waiting for the pedestrian signal to show the walking person or “WALK” symbol before crossing.
- Looking to the left, to the right, again to the left, and then BEHIND before crossing an intersection.
- Staying in the crosswalk, if there is one.
- Walking across the street, not running.
- Waiting for turning cars to pass at an intersection.
- Staying close to the car and waiting for an adult to help cross the parking lot.
- Walking two steps away from the rear bumpers of the line of cars in a parking lot if there is no sidewalk or median.
- Staying on the sidewalk away from the street when waiting for the bus.
- Keeping out of the danger zones around the bus.

What we learned will help us be safer pedestrians in our neighborhood, on our way to school, and as we wait for the bus. Most importantly, it will help us avoid being injured in crashes with vehicles.





10.2.2. Review of what was learned in the Bicycle Safety Education Program

Look at what we learned during the **Maryland Bicycle Safety Education Program!**

We talked about being safe bicyclists, watched videos, and participated in activities in the classroom and at home during the Maryland Bicycle Safety Education Program. Some of the things that we learned about were:

- Wearing our helmet whenever we ride a bike.
- Checking to make sure that our helmet, our bicycle, and our clothing are safe before riding.
- Understanding stop and yield signs and stoplights.
- Following all traffic laws.
- Recognizing common hazards that we may face when bicycling, such as debris, wet roads, and visual barriers, such as parked cars.
- Getting on a bike safely.
- Stopping safely.
- Using hand signals before turning left or right and slowing or stopping.
- Scanning over our left shoulder for traffic approaching from behind.
- Looking for traffic coming from all directions at an intersection.
- Making left and right turns.
- Controlling our bikes while maneuvering around objects and while riding close to other bicyclists.

What we learned will help us be safer bicyclists in our neighborhood, on our way to school, and in other places that we ride. Most importantly, it will help us avoid being injured in falls and in crashes with vehicles.



Duval County, FL Health Department

10.3. Summary of Maryland Pedestrian and Bicycle Safety Education Program for Newsletter

The following text can be modified and used to describe the **Maryland Pedestrian and Bicycle Safety Education Program** for a newsletter article.

(Name of School(s)) is/are offering the **Maryland Pedestrian and Bicycle Safety Education Program** to kindergarten through fifth grade students. As more pedestrians and cyclists use roadways, sidewalks, and bicycle paths, it is more important than ever for walkers, bicyclists, motorists and all citizens to understand the unique safety requirements that accompany these modes of transportation. In Maryland there were 3,110 pedestrian crashes and 1,067 bicycle crashes in 2000. The largest share of pedestrian crashes involved children under age 15 and the largest share of bicycle crashes involved children under age 15 (Maryland Highway Safety Office, 2001). This program is designed to prevent these pedestrian and bicycle injuries.

Hands-on activities and classroom discussions will both be used to give students the knowledge and skills needed to be safe pedestrians and bicyclists. Kindergarten through second grade students will learn pedestrian safety and third through fifth grade students will learn bicycle safety. The pedestrian program includes a series of lessons starting with the basic pedestrian concepts such as stopping at the edge, looking both ways before crossing the street and progressively instructing the children on more complex traffic scenarios such as intersections. The bicycle component will focus on array of topics such as the rules of the road, the laws pertaining to pedestrians and bicyclists, bicycle handling, skills and required safety equipment, such as helmets.

Activities are designed for learning the material and being fun for students. They include writing letters about safe walking and bicycling, doing skits, mapping safe routes to stores and schools, making economic comparisons, and practicing skills on bicycles. The lessons complement the curriculum that is being taught at each grade level; each lesson has been designed to incorporate specific Maryland Learner Outcomes. Ultimately, the program will teach students to be safe pedestrians and bicyclists in the community and reduce the number of bicycle and pedestrian injuries and fatalities occurring throughout the state. (Name of School(s)) is/are proud to offer the Maryland Pedestrian and Bicycle Safety Education Program to our students.



10.4. Resources for Assistance in Developing a Program

Some of the following organizations may be able to provide additional pedestrian and bicycle safety information, funding, or materials to develop the program in your community or school:

Maryland State Highway Administration
Office of Traffic and Safety
Maryland Highway Safety Office
Pedestrian and Special Programs Coordinator
7491 Connelley Drive
Hanover, MD 21076
Phone: (410)787-4050 Fax: (410)787-4020
www.sha.state.md.us/oots/oots.htm

Federal Highway Administration
Pedestrian and Bicycle Information Center
919-962-7419
202-366-4071
www.pedbikeinfo.org
www.walkinginfo.org
www.bicyclinginfo.org

Federal Highway Administration
Pedestrian and Bicycle Safety Program
202-366-5007
www.fhwa.dot.gov/environment/bikeped/

National Highway Traffic Safety Administration
202-366-1739
www.nhtsa.dot.gov/people/injury/pedbimot/ped/

National Safety Council
630-285-1121
www.nsc.org/

American Automobile Association
888-859-5161
www.aaamidatlantic.com/safety/corporate-comm.asp

National Center for Bicycling and Walking
202-463-6622
[www.bikefed.org/
education_and_public_awareness_campaigns.htm](http://www.bikefed.org/education_and_public_awareness_campaigns.htm)

League of American Bicyclists
202-822-1333
www.bikeleague.org/educenter/index.html

America Walks
503-222-1077
<http://www.americawalks.org/index.htm>

Brain Injury Association of America
703-236-6000
<http://www.biausa.org/>

Brain Injury Association of Maryland
800-221-6443
<http://www.biamd.org>

Local Law Enforcement Organizations

Local Safe Kids Coalition
Local phone numbers provided at:
http://www.safekids.org/state_display.cfm

County / City Planning Department

County Traffic Engineering Department

PTA or PTO



10.5. Bicycle Trailer Content Checklist

Enter the number of each item in the first blank after you have completed the program for the year. The original count should be filled in when you receive the trailer.

- ___ Large bicycles (Original Count ___)
- ___ Small bicycles (Original Count ___)
- ___ Helmets (Original Count ___)
- ___ Trash cans to store helmets (Original Count ___)
- ___ Wooden props (Original Count ___)
- ___ Traffic cones (Original Count ___)
- ___ Storage containers (Original Count ___)
- ___ Tool kit (Original Count ___)
- ___ Bike pumps (Original Count ___)
- ___ 50' ropes (Original Count ___)
- ___ Bean bags (Original Count ___)
- ___ Chalk (large bucket) (Original Count ___)

Notes on Damaged Materials:

List of Items that Need to be Re-Ordered:

Other Notes:



10.6. Bicycle Helmet Notices for Parents

The following notice can be sent home with students before the helmet lesson:

BRING YOUR HELMET TOMORROW

Dear Parents,

Your child has Physical Education Class Tomorrow! The students will discuss the importance of wearing a helmet that fits properly. Please send in your child's helmet so I can check it for them. It would be great if you could adjust it before your child comes to class.

Sincerely,

(Name of Teacher)
Physical Education Specialist

BRING YOUR HELMET TOMORROW

Dear Parents,

Your child has Physical Education Class Tomorrow! The students will discuss the importance of wearing a helmet that fits properly. Please send in your child's helmet so I can check it for them. It would be great if you could adjust it before your child comes to class.

Sincerely,

(Name of Teacher)
Physical Education Specialist

BRING YOUR HELMET TOMORROW

Dear Parents,

Your child has Physical Education Class Tomorrow! The students will discuss the importance of wearing a helmet that fits properly. Please send in your child's helmet so I can check it for them. It would be great if you could adjust it before your child comes to class.

Sincerely,

(Name of Teacher)
Physical Education Specialist



BE SURE YOUR CHILD'S NAME IS ON THE HELMET!

The following notice can be sent home with students who bring in helmets that are damaged or do not fit properly:

Dear _____,

A bicycle helmet has the power to reduce the risk of head injuries by as much as 85%. This percentage is greatly reduced if the helmet does not fit properly or is damaged in any way. Your child brought his/her helmet today for inspection and due to the problem mentioned below I was unable to award your child a certificate. I strongly encourage you to purchase a new helmet as soon as possible.

If your child will bring his/her new helmet to school, I will gladly help with the proper adjustments and award a certificate.

Sincerely Yours,

(Name of Teacher)

Physical Education Specialist

___Helmet Too Large ___Helmet Too Small ___Damaged Helmet ___Other(____)



10.7. Bicycle Helmet Fit Achievement Certificate

Congratulations!



Your bike helmet
has been properly fit on
(date) _____

Be sure to wear it every ride!

10.8. Bike Helmet Order Form

HELMET ORDER

Student Name: _____

Teacher Name: _____

Helmet Size: _____ Helmet Color: _____

Parent Pick Up: ____ Yes ____ No

If yes, Home Phone: or Work Phone: _____

Helmet Cost: _____ Donation (Optional): _____

Child's Signature that the Helmet(s) were received:

_____ Date: _____

HELMET ORDER

Student Name: _____

Teacher Name: _____

Helmet Size: _____ Helmet Color: _____

Parent Pick Up: ____ Yes ____ No

If yes, Home Phone: or Work Phone: _____

Helmet Cost: _____ Donation (Optional): _____

Child's Signature that the Helmet(s) were received:

_____ Date: _____



10.9. Example Certificate of Achievement



Mayor and Council – Rockville, Maryland

Certificate of Achievement

This certifies that:

has successfully completed the Maryland Pedestrian and Bicycle Safety Education Program.

On this day _____ at _____

I promise to be a safe bicyclist by...

- ✓ Always wearing a helmet;
- ✓ Obeying all traffic signs and signals;
- ✓ Yielding the right of way to pedestrians;
- ✓ Ride single file, not side by side; and
- ✓ Riding in the same direction as the traffic, not facing it.

Certificate Recipient
Rockville Bikeway Coordinator

10.10. Pedestrian and Bicycle Safety Trivia Cards



10.11. Find the 12 Hazards Worksheet



10.12. Program Flier

